

## Agenda Resources Subcommittee (RS)

October 26, 2011 | 1:00 p.m.–5:00 p.m.

October 27, 2011 | 8:00 a.m.–5:00 p.m.

NV Energy  
6155 Lindell Road  
Las Vegas, Nevada  
702-402-6609

Conference – 1-866-740-1260, Pass code 5247004

### Introductions and Chair's Remarks

### NERC Antitrust Compliance Guidelines and Public Announcement

### Agenda

#### 1. Administrative

- a. Membership and Guests\* — Chair Bilke
  - i. RS Organization and Assignments
  - ii. RS Roster
  - iii. RS Survey Contacts
- b. Arrangements — Larry Kezele
- c. Parliamentary Procedures\* — Larry Kezele
- d. **Approval** — Meeting Agenda — Chair Bilke
- e. **Approval** — July 27–28, 2011 Meeting Minutes\* — Chair Bilke
- f. Resources Subcommittee Action Items List\* — Chair Bilke
- g. NERC–RS Confidentiality Agreement\* — Chair Bilke
- h. Election of Officers — Chair Bilke

#### 2. Working Groups and Task Force Reports

- a. Frequency Work Group — Sydney Niemeyer
- b. Inadvertent Interchange Work Group — Vice Chair Badley
- c. Operating Reserves Work Group — Larry Akens

- d. ACE Diversity Interchange Task Force — Vice Chair Badley
- e. Nominating Committee – Chair Bilke and Mike Potishnak
- f. Discussion – Is there a need for a half day meeting for one on the Work Groups?

### **3. NERC Related Activity**

- a. NERC Operating Committee Action Items Assigned to RS — Chair Bilke
  - i. Time Error Correction Elimination Field Trial (Update and Open Action Items)
  - ii. Sharing ANI/SNI data in real time to improve reliability
  - iii. Request comments on the ACE Diversity Interchange white paper
- b. Support for Frequency Response Initiative and Frequency Response Standards — Chair Bilke
  - i. Select Candidate Events
  - ii. Evaluate Current Frequency Response
  - iii. Observations from 2011 Annual Bias Setting
- c. ALF1-12 Frequency Response Metric Data Collection Process\* – Matthew Varghese
- d. Housekeeping Tasks for New, Reconfigured, or Retiring Balancing Authorities\* – Mike Potishnak
- e. Frequency Response Initiative, Activity and RS Assignments — Bob Cummings
- f. Frequency Event Repository: Short-term (NERC Situation Awareness) and Long-term (FMA Application) — Chair Bilke
- g. Reliability Metrics Working Group (RMWG) — Jerry Rust

### **4. NERC Reliability Standards and Reliability Related Documents**

- a. Frequency Response SDT— David Lemmons
- b. Balancing Authority Reliability-based Control SDT — Larry Akens
- c. NERC OC Operating Manual
  - i. Area Interchange Error Survey Training Document — Vice Chair Badley and Inadvertent Interchange Working Group
  - ii. Frequency Response Characteristic Survey Training Document — Sydney Niemeyer and Frequency Working Group
  - iii. Inadvertent Interchange Accounting Training Document — Vice Chair Badley and Inadvertent Interchange Working Group
  - iv. Time Monitoring Reference Document — Vice Chair Badley and Inadvertent Interchange Working Group

## 5. RS Software Applications

- a. Resources Adequacy (ACE-Frequency) Application — Gil Tam, Chair Bilke
- b. Intelligent Alarms — Gil Tam, Chair Bilke
- c. AIE Monitoring Application — Gil Tam and Vice Chair Badley
- d. CPS1 & BAAL Monitoring Application — Gil Tam, Larry Akens
- e. Frequency Monitoring and Analysis Application — Gil Tam, Sydney Niemeyer, Chair Bilke
- f. Inadvertent Interchange Application — Gil Tam and Vice Chair Badley
- g. NERC-CERTS-RS Inadvertent Interchange Application Support of TEC Field Trial — Chair Bilke, Gil Tam
- h. NERC North American SynchroPhasor Initiative (NASPI) and Real-time Dynamic Measuring System (RTDMS) — Bob Cummings
- i. ARR Daily Events — Status update on previously reported problems

## 6. Frequency and Control Performance

- a. Frequency Performance, Trends and Events
  - i. Western Interconnection — James Murphy
  - ii. Eastern Interconnection — Chair Bilke
  - iii. ERCOT Interconnection — Sydney Niemeyer
  - iv. Hydro Quebec Interconnection — Mike Potishnak
  - v. TEC Field Trial Impact Analysis (Placeholder for Future Meetings)
- b. CPS1, CPS2, BAAL Data Trends — Chair Bilke
- c. DCS Data Trends — Chair Bilke
- d. Inadvertent Interchange Accounting — Vice Chair Badley
  - i. Balances
  - ii. Mismatches
  - iii. Remaining Transition Issues
  - iv. TEC Field Trial Observations and Statistics (Placeholder for Future Meetings)

## 7. Time Error

- a. Eastern Interconnection — Chair Bilke
- b. Western Interconnection — John Tolo

- c. ERCOT Interconnection — Sydney Niemeyer
- d. Hydro Québec Interconnection — Mike Potishnak
- e. Field Trial Status (placeholder for future meetings)

#### **8. Future Meetings**

- a. January 25–26, 2012 — Miami, FL, Host Florida Power and Light at Lejune Flagler facility, Contact: Don McInnis
- b. April 25–26, 2012 — San Francisco, CA or San Antonio, TX, Host TDB, Contact WECC RS or ERCOT RS Members
- c. July 25–26, 2012 — Boston, MA or Portland, ME, Host TDB, Contact NPCC RS Members

\*Background materials included.

# Antitrust Compliance Guidelines

## I. General

It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition.

It is the responsibility of every NERC participant and employee who may in any way affect NERC's compliance with the antitrust laws to carry out this commitment.

Antitrust laws are complex and subject to court interpretation that can vary over time and from one court to another. The purpose of these guidelines is to alert NERC participants and employees to potential antitrust problems and to set forth policies to be followed with respect to activities that may involve antitrust considerations. In some instances, the NERC policy contained in these guidelines is stricter than the applicable antitrust laws. Any NERC participant or employee who is uncertain about the legal ramifications of a particular course of conduct or who has doubts or concerns about whether NERC's antitrust compliance policy is implicated in any situation should consult NERC's General Counsel immediately.

## II. Prohibited Activities

Participants in NERC activities (including those of its committees and subgroups) should refrain from the following when acting in their capacity as participants in NERC activities (e.g., at NERC meetings, conference calls and in informal discussions):

- Discussions involving pricing information, especially margin (profit) and internal cost information and participants' expectations as to their future prices or internal costs.
- Discussions of a participant's marketing strategies.
- Discussions regarding how customers and geographical areas are to be divided among competitors.
- Discussions concerning the exclusion of competitors from markets.
- Discussions concerning boycotting or group refusals to deal with competitors, vendors or suppliers.

- Any other matters that do not clearly fall within these guidelines should be reviewed with NERC's General Counsel before being discussed.

### **III. Activities That Are Permitted**

From time to time decisions or actions of NERC (including those of its committees and subgroups) may have a negative impact on particular entities and thus in that sense adversely impact competition. Decisions and actions by NERC (including its committees and subgroups) should only be undertaken for the purpose of promoting and maintaining the reliability and adequacy of the bulk power system. If you do not have a legitimate purpose consistent with this objective for discussing a matter, please refrain from discussing the matter during NERC meetings and in other NERC-related communications.

You should also ensure that NERC procedures, including those set forth in NERC's Certificate of Incorporation, Bylaws, and Rules of Procedure are followed in conducting NERC business.

In addition, all discussions in NERC meetings and other NERC-related communications should be within the scope of the mandate for or assignment to the particular NERC committee or subgroup, as well as within the scope of the published agenda for the meeting.

No decisions should be made nor any actions taken in NERC activities for the purpose of giving an industry participant or group of participants a competitive advantage over other participants. In particular, decisions with respect to setting, revising, or assessing compliance with NERC reliability standards should not be influenced by anti-competitive motivations.

Subject to the foregoing restrictions, participants in NERC activities may discuss:

- Reliability matters relating to the bulk power system, including operation and planning matters such as establishing or revising reliability standards, special operating procedures, operating transfer capabilities, and plans for new facilities.
- Matters relating to the impact of reliability standards for the bulk power system on electricity markets, and the impact of electricity market operations on the reliability of the bulk power system.
- Proposed filings or other communications with state or federal regulatory authorities or other governmental entities.

Matters relating to the internal governance, management and operation of NERC, such as nominations for vacant committee positions, budgeting and assessments, and employment matters; and procedural matters such as planning and scheduling meetings.

## NERC Resources Subcommittee Organization

<b>Terry Bilke (Chair)</b> Midwest ISO	Donald E. Badley ( <b>Vice Chair</b> ) WECC/Northwest Power Pool	Larry Akens Tennessee Valley Authority
Gerald D. Beckerle Ameren Services Company	John Tolo Tucson Electric Power Company	Don McInnis Florida Power & Light Company
James Murphy Bonneville Power Administration	William Kunkel Midwest Reliability Organization	Sydney L. Niemeyer NRG Texas Power, LLC
Tony Nguyen British Columbia Hydro	Michael Oatts Southern Company Services	Michael J. Potishnak ISO-New England
Robert C. Rhodes, Jr. Southwest Power Pool	John Swez Duke Energy	
Larry Kezele NERC		
<b>Inadvertent Working Group</b>  Don Badley – Chair Mike Potishnak Terry Bilke Larry Akens William Kunkel James Murphy Tony Nguyen Tom Pruitt Tabitha Hernandez	<b>Frequency Working Group</b>  <b>Sydney Niemeyer – Chair</b> Mike Potishnak Terry Bilke Gerry Beckerle Don Badley James Murphy John Swez Robert Rhodes Bob Cummings Tony Nguyen Carlos Martinez Troy Blalock Tom Pruitt	<b>Reserves Working Group</b>  <b>Larry Akens – Chair</b> Don Badley Mike Potishnak Sydney Niemeyer Robert Rhodes James Murphy John Tolo John Swez Gerry Beckerle Mike Oatts Troy Blalock
<b>Survey Assignments</b>		
Area Interchange Error Surveys (East)	Terry Bilke	
Frequency Response Surveys (ERCOT)	Sydney Niemeyer	
Frequency Response Surveys (WECC)	To Be Determined	
Frequency Response Surveys (East)	To Be Determined	
Frequency Response Surveys (HQ)	To Be Determined	
Inadvertent Interchange Reports (East)	Chris Scheetz	
Inadvertent Interchange Reports (West)	Don Badley	
Time Error Reports (East)	To Be Determined	
Time Error Reports (West)	John Tolo	
ERCOT Reports	Sydney Niemeyer	

## Resources Subcommittee

<b>Chairman</b>	Terry L. Bilke Consulting Advisor	Midwest ISO, Inc. 720 City Center Drive P.O. Box 4202 Carmel, Indiana 46082-4202	(317) 249-5463 (317) 249-5358 Fx tbilke@ misoenergy.org
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<b>WECC</b>	Tony M Nguyen System Control Manager	BC Hydro 1055 Dunsmuir St. #1100 P.O. Box 49260 Vancouver, British Columbia V7X 1V5	(604) 455-1780 tony.nguyen@ bchydro.com
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## NERC Resources Subcommittee Survey Contacts

CONTACT	REGION	PHONE
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Larry Akens	TVA SERC	(423) 751-8860
Robert Rhodes* Mike Whalen (CPS) Lisa Carter (Inadvertent) David Gray (DCS)	SPP	(501) 614-3241 (501) 614-3395 (501) 614-3346 (501) 614-1632
Esperanza Cabeza de Vaca (CPS)	WECC	(801) 582-0353
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Chris Scheetz	NERC	(609) 524-7030
Carlos Martinez	CERTS	(626) 685-2015
Gil Tam	EPG	(310) 600-4863
<b>TIME CORRECTIONS:</b> David Devereaux (IESO Reliability Coordinator)	IESO (Ontario)	(905) 855-6439

\*Primary Contact

## Parliamentary Procedures

Based on Robert's Rules of Order, Newly Revised, 10th Edition, plus "Organization and Procedures Manual for the NERC Standing Committees"

### Motions

Unless noted otherwise, all procedures require a "second" to enable discussion.

When you want to...	Procedure	Debatable	Comments
Raise an issue for discussion	Move	Yes	The main action that begins a debate.
Revise a Motion currently under discussion	Amend	Yes	Takes precedence over discussion of main motion. Motions to amend an amendment are allowed, but not any further. The amendment must be germane to the main motion, and can not reverse the intent of the main motion.
Reconsider a Motion already approved	Reconsider	Yes	Allowed only by member who voted on the prevailing side of the original motion.
End debate	Call for the Question <i>or</i> End Debate	Yes	If the Chair senses that the committee is ready to vote, he may say "if there are no objections, we will now vote on the Motion." Otherwise, this motion is debatable and subject to 2/3 majority approval.
Record each member's vote on a Motion	Request a Roll Call Vote	No	Takes precedence over main motion. No debate allowed, but the members must approve by 2/3 majority.
Postpone discussion until later in the meeting	Lay on the Table	Yes	Takes precedence over main motion. Used only to postpone discussion until later in the meeting.
Postpone discussion until a future date	Postpone until	Yes	Takes precedence over main motion. Debatable only regarding the date (and time) at which to bring the Motion back for further discussion.
Remove the motion for any further consideration	Postpone indefinitely	Yes	Takes precedence over main motion. Debate can extend to the discussion of the main motion. If approved, it effectively "kills" the motion. Useful for disposing of a badly chosen motion that can not be adopted or rejected without undesirable consequences.
Request a review of procedure	Point of order	No	Second not required. The Chair or secretary shall review the parliamentary procedure used during the discussion of the Motion.

### Notes on Motions

**Seconds.** A Motion must have a second to ensure that at least two members wish to discuss the issue. The "second" is not recorded in the minutes. Neither are motions that do not receive a second.

**Announcement by the Chair.** The Chair should announce the Motion before debate begins. This ensures that the wording is understood by the membership. Once the Motion is announced and seconded, the Committee "owns" the motion, and must deal with it according to parliamentary procedure.

## Voting

Voting Method	When Used	How Recorded in Minutes
Unanimous Consent	When the Chair senses that the Committee is substantially in agreement, and the Motion needed little or no debate. No actual vote is taken.	The minutes show "by unanimous consent."
Vote by Voice	The standard practice.	The minutes show Approved or Not Approved (or Failed).
Vote by Show of Hands (tally)	To record the number of votes on each side when an issue has engendered substantial debate or appears to be divisive. Also used when a Voice Vote is inconclusive. (The Chair should ask for a Vote by Show of Hands when requested by a member).	The minutes show both vote totals, and then Approved or Not Approved (or Failed).
Vote by Roll Call	To record each member's vote. Each member is called upon by the Secretary,, and the member indicates either "Yes," "No," or "Present" if abstaining.	The minutes will include the list of members, how each voted or abstained, and the vote totals. Those members for which a "Yes," "No," or "Present" is not shown are considered absent for the vote.

### Notes on Voting

(Recommendations from DMB, not necessarily Mr. Robert)

**Abstentions.** When a member abstains, he is not voting on the Motion, and his abstention is not counted in determining the results of the vote. The Chair should not ask for a tally of those who abstained.

**Determining the results.** The results of the vote (other than Unanimous Consent) are determined by dividing the votes in favor by the total votes cast. Abstentions are not counted in the vote and shall not be assumed to be on either side.

**"Unanimous Approval."** Can only be determined by a Roll Call vote because the other methods do not determine whether every member attending the meeting was actually present when the vote was taken, or whether there were abstentions.

**Majorities.** Robert's Rules use a simple majority (one more than half) as the default for most motions. NERC uses 2/3 majority for all motions.

## Minutes Resources Subcommittee

July 27–28, 2011  
Golden, Colorado

A meeting of the North American Electric Reliability Corporation (NERC) Resources Subcommittee (RS) was held on July 27–28, 2011 in Golden, Colorado. The agenda and attendance list are attached as **Exhibits A** and **B**, respectively.

Resources Subcommittee Chair Terry Bilke presided and Larry Kezele announced that a quorum was present. Larry Kezele read the applicable Notice of Public Meeting.

### **Antitrust Compliance Guidelines**

Larry Kezele acknowledged the NERC Antitrust Compliance Guidelines.

### **April 20–21, 2011 Meeting Minutes**

The subcommittee approved the April 20–21, 2011 meeting minutes.

### **Administrative**

The RS reviewed and revised the RS Organization and Assignments, the RS Roster, and the RS Survey Contacts.

### **Working Group and Task Force Reports**

1. **Frequency Working Group** — Chair Sydney Niemeyer reported that the Frequency Working Group met on July 27, 2011. The working group decided to develop a list of events, by Interconnection, by September 1, 2011, for Bob Cummings' review. Following his review, he will forward the final list to Chair Bilke, who will forward it on to the Reliability Metrics Working Group.
2. **Inadvertent Interchange Working Group** — Chair Don Badley reported that the working group has not met since the subcommittee's last meeting.
3. **Operating Reserves Working Group** — Chair Larry Akens reported that the working group has not met since the subcommittee's last meeting. There will begin to be some interaction between the BARC standard drafting team and the working group.
4. **ACE Diversity Interchange Task Force** — Chair Don Badley stated that the task force met on July 27, 2011 to finalize its whitepaper. He reviewed the latest

draft of the whitepaper, which the subcommittee modified during its discussion. Robert Rhodes moved to endorse the ACE Diversity Interchange White Paper dated July 28, 2011 (**Exhibit C**). The subcommittee briefly discussed the criteria it might use for approving new ACE Diversity Interchange programs. The subcommittee approved the motion. Larry Kezele was tasked to inform the Interchange Subcommittee and the Operating Reliability Subcommittee of the subcommittee's action and to seek additional comments and endorsement from the two subcommittees.

5. **Working Group Meetings** — The Frequency Working Group will meet on the morning of October 26, 2011 from 9 a.m. – 12 p.m. The subcommittee meeting will begin at 1 p.m. on October 26, 2011 and will meet from 8 a.m. – 5 p.m. on October 27, 2011. The Inadvertent Interchange Working Group will meet from 8 a.m. – 12 p.m. on October 28, 2011.
6. **Nominating Committee** — Chair Bilke would like to have the subcommittee more actively address open action items. To help with this, he suggested that subcommittee members reach out to their contacts for additional support, for example, by increasing the membership on its working groups. The new working group members could also serve as proxies and possible alternates as existing members leave the subcommittee.

Chair Bilke also reported that his term as chair is expiring at the end of 2011. He asked that the subcommittee consider forming a nominating committee to develop a slate of officers for consideration at its next meeting. Mike Potishnak volunteered to serve as chair of the nominating committee.

### **NERC Related Activity**

1. **Time Error Correction Elimination Field Trial** — Chair Bilke will provide a Manual Time Error Correction Elimination Field Trial status report to the NERC Operating Committee at its September 2011 meeting.
2. **Sharing ANI/SNI Data in Real Time to Improve Reliability** — Mike Oatts reported that the Operating Committee requested further input from the Interchange Subcommittee, the Resources Subcommittee and the Operating Reliability Subcommittee related to a project to share, within each Interconnection, actual and scheduled net interchange in real time. Some the requested information could be made available by ICCP and an application developed. Mr. Oatts will continue to discuss this potential project with the Operating Reliability Subcommittee. FRCC has a similar application being used by FRCC balancing authorities.

3. **Input to NERC Operating and Planning Committees Related to Frequency Response** — Chair Bilke reminded the subcommittee that the NERC Operating Committee approved its Frequency Response whitepaper and also reviewed the Transmission Issues Subcommittee’s (TIS) draft *Interconnection Criteria for Frequency Response Requirements* whitepaper. The whitepapers arrive at somewhat different conclusions, which Chair Bilke will bring to the Committee’s attention at its September 2011 meeting.
4. **Frequency Response Initiative and Frequency Response Standards** — Refer to the Frequency Working Group’s report above.
5. **Frequency Response Initiative, Activity and RS Assignments** — The subcommittee discussed this agenda topic when it discussed open action items. In addition, Bob Cummings discussed potential alternative scenarios to those identified in the TIS’ *Interconnection Criteria for Frequency Response Requirements* draft whitepaper.
6. **Frequency Event Repository: Short-term (NERC Situation Awareness) and Long-term (FMA Application)** — Chair Bilke reported that it is his expectation that once Bob Cummings has completed the frequency events spreadsheet that the spreadsheet be publicly posted. A non-public version of the spreadsheet will also be available to the subcommittee.
7. **Reliability Metrics Working Group** — Jerry Rust, the Reliability Metrics Working Group’s liaison to the RS, discussed reliability metric ALR1-12 (Interconnection Frequency Response). The subcommittee is working to finalize a listing of frequency events by September 1, 2011 for use by the RMWG.

Mr. Rust informed the subcommittee that the NERC Operating Committee’s Executive Committee endorsed the *2011 Risk Assessment of Reliability Performance* report. He noted that beginning with its 2012 annual report the RMWG is transitioning to a *State of Reliability* report and that the subcommittee may be asked to contribute to its development. He also summarized the RMWG’s efforts to develop an Integrated Reliability Index.

### **NERC Reliability Standards and Reliability Related Documents**

1. **Frequency Response Standard Drafting Team** — Chair Bilke encouraged the Frequency Response Standard Drafting Team to draft a technical reference document to support implementation of the proposed standard.
2. **Balancing Authority Reliability-based Controls Standard Drafting Team** — Larry Akens, chair of the Balancing Authority Reliability-based Controls Standard Drafting Team, summarized drafting team activities. Recently, NERC moved this standard drafting project to a higher priority. The BARC SDT is coordinating its work with the Frequency Response Standard Drafting Team.

### 3. NERC Operating Manual

- a. **Area Interchange Error Survey Training Document** — Vice Chair Badley, chair of the Inadvertent Interchange Working Group, reported that the working group anticipates developing a revised AIE Survey Training Document for review by the subcommittee at its next meeting.
- b. **Frequency Response Characteristic Survey Training Document** — Chair Bilke reported that the Frequency Response Standard Drafting Team will be reviewing this training document.
- c. **Inadvertent Interchange Accounting Training Document** — Vice Chair Badley, chair of the Inadvertent Interchange Working Group, reported that the working group has not yet addressed updating this training document.
- d. **Time Monitor Reference Document** — Chair Bilke reported that the subcommittee will review and revise the Time Monitor Reference Document to accommodate the implementation of the manual time error correction elimination field trial.

### Resources Subcommittee Software Applications

1. **Software Applications Status Report** — Gil Tam, representing Electric Power Group (EPG), provided a summary of the applications shown below (**Presentation 1**).
  - a. Resources Adequacy
  - b. Intelligent Alarms
  - c. Area Interchange Error Monitoring
  - d. CPS and BAAL Monitoring
  - e. Frequency Monitoring and Analysis
  - f. Inadvertent Interchange
  - g. Automated Reliability Reports

Mr. Tam reported that EPG implemented the new delta frequency detection methodology on July 15, 2011 in the Frequency Monitoring and Analysis application. Following the subcommittee's extensive discussion of the preliminary results shown by the detection methodology, Sydney Niemeyer, as chair of the Frequency Working Group, will document criteria for use within the FMA application to revise the current delta frequency detection methodology. EPG will develop a monthly summary of Interconnection events for use by the Frequency Working Group. The FMA data is being used 1) to benchmark

Interconnection frequency performance (e.g., to provide data for use by the RMWG) and 2) by the Frequency Response Standard Drafting Team.

In addition, Mr. Tam reported that surveys using the Area Interchange Error application are generally initiated by a subcommittee member. WECC staff and the WECC Performance Working Group would like to have the ability to initiate an AIE survey and have the WECC balancing authorities use the WIT tool to submit the required data. To fully implement this request, Mr. Tam stated that the application may have to be upgraded. Mr. Tam will further investigate the need for an application upgrade. The subcommittee agreed by consensus that the Interconnections could use the AIE application to conduct surveys for training and diagnostic purposes.

2. **Inadvertent Interchange Application Support of TEC Field Trial** — This agenda item was not discussed.

## **Time Error, Frequency Performance, and Control Performance**

1. **Time Error and Frequency Performance**
  - a. **Western Interconnection Trends and Events** — James Murphy reviewed the Western Interconnection frequency performance (**Presentation 2**) and Vice Chair Badley reviewed the Western Interconnection year-to-date time error reports (**Presentation 3**).
  - b. **Eastern Interconnection Trends and Events** — Chair Bilke reviewed the Eastern Interconnection frequency performance (**Presentation 4**). He will contact PJM to find a replacement for Bill Herbsleb, who previously developed the Eastern Interconnection time error reports.
  - c. **ERCOT Interconnection Trends and Events** — Sydney Niemeyer reviewed the ERCOT Interconnection frequency performance and time error report (**Presentations 5 and 6**).
  - d. **Hydro Quebec Interconnection Trends and Events** — Chair Bilke reviewed the Hydro Quebec Interconnection frequency performance and time error report (**Presentation 7**).
2. **CPS1, CPS2, BAAL Data Trends** — In closed session, the subcommittee discussed CPS1, CPS2, and BAAL data trends.
3. **DCS Data Trends** — In closed session, the subcommittee discussed DCS data trends.
4. **Status of New/Reconfigured Balancing Authority Checklist** — Mike Potishnak and Chair Bilke will review the revised balancing authority checklist with Jim Hughes, NERC's manager of organization registration and certification.

5. **Inadvertent Interchange Accounting** — Vice Chair Badley reviewed Western Interconnection on-peak and off-peak inadvertent interchange monthly balances. Vice Chair Badley and the Inadvertent Interchange Working Group will work to develop an inadvertent interchange report for the Eastern Interconnection.
6. **TEC Field Trial Observations and Statistics** — Since the Manual Time Error Correction Field Trial has not yet started, this agenda topic was not discussed.

**Resources Subcommittee Action Item List**

The subcommittee reviewed and updated the action item list, which is affixed as **Exhibit D**.

**Dates and Locations of Future Meetings**

Wednesday, October 26, 2011 (FWG)	8 a.m. – 12 p.m.	Las Vegas, NV
Wednesday, October 26, 2011 (RS)	1 p.m. – 5 p.m.	Host: TBD, WECC RS members
Thursday, October 27, 2011 (RS)	8 a.m. – 5 p.m.	Coordinator: WECC RS Members
Friday, October 28, 2011 (IIWG)	8 a.m. – 12 p.m.	
Wednesday, January 25, 2012	8 a.m. – 5 p.m.	Ft. Lauderdale / Miami
Thursday, January 26, 2012	8 a.m. – noon	Alternate: Tampa Coordinator: Don McInnis
Wednesday, April 25, 2012	8 a.m. – 5 p.m.	San Francisco
Thursday, April 26, 2012	8 a.m. – noon	Alternate: San Antonio Coordinator: WECC RS Members or ERCOT RS Members
Wednesday, July 25, 2012	8 a.m. – 5 p.m.	Boston
Thursday, July 26, 2012	8 a.m. – noon	Alternate: Portland, Maine Coordinator: NPCC RS Members
Wednesday, October 24, 2012	8 a.m. – 5 p.m.	Atlanta
Thursday, October 25, 2012	8 a.m. – noon	Alternate: Albuquerque, NM Coordinator: NERC Staff

**Adjourn**

The subcommittee meeting adjourned at 2:23 p.m. MDT on July 28, 2011.

Respectfully submitted,

*Larry Kezele*

Larry Kezele  
Resources Subcommittee Secretary



**Resources Subcommittee  
July 27–28, 2011 Meeting  
Open Action Items List**

<b>Action Figure</b>	<b>Subject</b>	<b>Action Item/Assignment</b>	<b>Due Date</b>	<b>Completion Date</b>
Resources Subcommittee	NERC Frequency Response Initiative	<p>042710, Resources Subcommittee to support Bob Cummings and the Frequency Response Initiative (FRI). RS will work with RS Frequency WG, the BARCSDT, the FRRSDT, NERC Staff, FERC Staff, and industry contributors to address relative issues and concerns.</p> <p>012611, Bob Cummings to give a status of the FRI and RS-related FRI assignments.</p> <p>012711, Work with Bob Cummings to develop a common data set and finalize the field test parameters.</p> <p>072711. Working to finalize an events list by 090111 for all Interconnections.</p>	Ongoing	
Mike Potishnak	BA Check List for Decertification or New BAs	<p>102809, Bill Herbsleb, Mike Potishnak, and Tom Vandervort to develop some sort of check list on what needs to be done when a BA:</p> <ul style="list-style-type: none"> <li>• New Certifications</li> <li>• Decertifications</li> <li>• Merges</li> <li>• Consolidates, Etc.</li> </ul> <p>012710, Terry asked Bill and Mike to develop the BA Check List.</p> <p>Mike wants to have the BA mapping as part of the resolution (what is looked at before and after a BA divides, merges, retires, etc. – the initial BA and resulting BA).</p> <p>042810, Bill Herbsleb to send NERC BA certification / decertification action items to Tom Vandervort to process.</p> <p>102710, Bill drafted a BA certification check-list for new BAs, merged BAs, and</p>	020311	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
		<p>decertified BAs. Bill requested the RS to review and enhance the check-list for the January, 2011 RS meeting.</p> <p>012711 Bill Herbsleb to send out the check list to Jim Hughes.</p> <p>042011 Bill Herbsleb to send the check list to Jim Hughes.</p> <p>072711 Mike Potishnak to send the check list to Jim Hughes.</p>		
Mike Potishnak	FMA Application Accuracy	<p>102810, Gil Tam, CERTS requested the RS to review the (+ or -) signs in the FMA application to ensure accuracy of the FMA Application. Bill Herbsleb and Mike Potishnak volunteered to review the BA Bias signs in the FMA Application.</p> <p>012711 Bob Cummings and Bill Herbsleb to review.</p> <p>042011 Bob Cummings to review.</p> <p>072711 Bob Cummings to provide official response regarding sign convention. Gil Tam will review this issue with Bob Cummings.</p>	Ongoing	
Don Badley	Inadvertent Interchange Balances Determination	<p>102810, Bill will draft a letter on behalf of the RS to the Balancing Authorities (BAs) in the Eastern Interconnection stating their inadvertent interchange balances prior to January, 2007 with a request to the BAs to identify any disputes with evidence to correct and establish a definitive historic and accurate inadvertent interchange balance.</p> <p>012711 RS reviewed draft letter. Terry Bilke will issue the revised letter.</p> <p>042011 Letter issued, with responses due from BAs by 041511. Discuss later in the agenda.</p> <p>072711 Chair Bilke asked the Inadvertent Working Group seek additional resources to help in tracking inadvertent. He suggested that the working group generate a quarterly report for RS review. Gil Tam noted that EPG sends out two inadvertent reports each month that identifies what BAs have submitted data and the accuracy of the data.</p>	021111	
Resources Subcommittee	NERC OC Operating Manual Docs	<p>073108, RS members on each open BAL-related standard drafting team are to request that the SDT write or plan to write a modules for each SDT specific requirement and how to achieve technical results for the PSRD.</p> <p>102908, Resources Subcommittee recommended to the OC that the RS documents that are found in the OC Operating Manual be kept in the manual.</p> <p><b>102908, RS Working Groups and RBCSDT, BACSDT, and FRSDT are to revise the documents for accuracy. RS will then submit the revised documents to the RFWG to update the manual. SDTs can develop the documents as standards</b></p>	Ongoing	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
		<p><b>reference documents to support their respective standards.</b></p> <p>012909, John Swez to review the Performance Standard Reference Document for accuracy. Ongoing action item.</p> <p>RS Operating Manual documents are:</p> <p><b>Performance Standard Reference Guidelines (PSRG) – John Swez</b> – Note the OC approved the PSRG on June 15, 2010, new PSRG inserted into the NERC Operating Manual</p> <p><b>Area Interchange Error Survey Training Document – Don Badley and Inadvertent Interchange WG</b></p> <p><b>Frequency Response Training Document – Sydney Niemeyer and Frequency WG</b></p> <p><b>Inadvertent Interchange Accounting Training Document – Don Badley and Inadvertent Interchange WG – Expect update by next meeting.</b></p> <p><b>Time Monitoring Reference Document – Don Badley and Inadvertent Interchange WG – Terry Bilke and Mike Potishnak will review for inconsistencies with proposed TEC Field Trial</b></p> <p>121609, NERC posted the Performance Standard Reference Document for 45 day comment period which ends on Feb 12, 2010.</p> <p>102710, The OC approved the PSRG on June 15, 2010. The RS anticipates the remaining OC Operating Manual documents to be revised during the SDT standards revision process.</p> <p>072711 Chair Bilke reported that is an ongoing task.</p>		
Larry Kezele	CPS Data	<p>102810, During the CPS data review, it was pointed out that not all Canadian entities are included in the CPS Summary. Tom to visit with Chris Scheetz to include future Canadian entities into the CPS Summary.</p> <p>012711 Review data later in today's meeting</p> <p>072711 Some Canadian entities are still missing from the CPS1, CPS2, and DCS reports. Don Badley contacted Chris Scheetz regarding this issue.</p>	012611	

Action Figure	Subject	Action Item/Assignment	Due Date	Completion Date
Gil Tam	Inadvertent Interchange Application	<p>102810, Gil to explain what does the Inadvertent Interchange application “locked” and “unlocked” terms mean? Explain if there is an audit trail for locking and unlocking the application whenever there is an adjustment.</p> <p>012711 Bill Herbsleb’s letter will address this issue.</p> <p>042011 Gil Tam reported that only SPP locks its inadvertent interchange data. This is also a training issue for regional administrators. EPG will investigate developing a user training program.</p> <p>042011 EPG could develop an audit trail report for the inadvertent interchange application.</p> <p>072711 Training issue for regional administrators. Gil Tam to review meaning of percentage of lock.</p>	012611	
Eddy Lim	Collect and analyze data to establish a new primary frequency control metric	<p>012711 Collect and analyze data to establish a new primary frequency control metric</p> <p>042011 Continuing to support the Frequency Response Initiative and other frequency response activities. Use data from 2009 through first quarter 2011.</p> <p>072711 Bob Cummings is reviewing the comments received and will be issuing a final report by September 1, 2011.</p>	June Operating Committee meeting	
Don McInnis	FRCC BA use of NERC Inadvertent Interchange Application	<p>042011 FRCC investigating uploading its inadvertent interchange date into the NERC Inadvertent Interchange Application.</p> <p>072711 Don McInnis not available to provide an update.</p>	July RS Meeting	

**NERC CONFIDENTIALITY AGREEMENT  
 FOR  
 NERC RESOURCES SUBCOMMITTEE MEMBERS**

This Confidentiality Agreement (“Agreement”), dated \_\_\_\_\_, is between the North American Electric Reliability Corporation (“NERC”), and

\_\_\_\_\_, a member of the NERC Resources Subcommittee (“RS Member”) (collectively referred to as “Parties”).

**WHEREAS**, NERC Compliance Monitoring and Enforcement Program collects, reviews, evaluates, and determines if the control performance data is acceptable or in violation of NERC reliability standards’ requirements; and

**WHEREAS**, NERC Resources Subcommittee, in accordance with the Resources Subcommittee Charter, is the NERC technical resource to support resolution of balancing resources and demand issues and interconnection frequency related issues by providing industry leadership and guidance on matters relating to balancing resources and demand issues and interconnection frequency related issues; reviewing balancing authorities’ control performance on a periodic basis; and addressing technical issues on Automatic Generation Control (AGC), Time Error Correction, Operating Reserves, and Frequency Response; and

**WHEREAS**, NERC staff and software vendors have established computer applications to collect, tabulate, and carry out the collection and analysis process for both the Compliance Monitoring and Enforcement Program and the NERC Resources Subcommittee; and

**WHEREAS**, in order for the Resources Subcommittee to fulfill its charter, it is necessary for the Resources Subcommittee Members to have access to confidential control performance data and information from operating entities within NERC, and to be able to conduct open and unconstrained discussions among team members,

The Parties therefore agree as follows:

1. The term “Control Performance Data” means all data and information that the operating entities within NERC regions have furnished or are furnishing to NERC in connection with the operating entities’ operations within the Bulk Power System, whether furnished before or after the date of this Agreement, whether tangible or intangible, and in whatever form or medium provided (including, without limitation, oral communications), as well as all information generated by the Compliance Monitoring and Enforcement Program.

2. The RS Member understands and agrees that the Control Performance Data is being made available solely for purposes of the work of the Resources Subcommittee and that the Control Performance Data shall not be used in any manner to further the commercial interests of any person or entity. The RS Member further understands and agrees that he or she will not disclose Control Performance Data to any person who has not signed this Agreement except:

- a. as such disclosure may be required by law or judicial or regulatory order;
- b. in accordance with paragraph 5; or
- c. that a RS Member who is NERC or Regional Entity staff member may make Control Performance Data available to the NERC or regional compliance program.

3. If the RS Member's employing organization has signed the NERC Confidentiality Agreement for Operating Reliability Data ("NERC ORD Agreement"), paragraph 2 shall not be deemed to prohibit RS Member from disclosing Control Performance Data to other employees of that organization, but only to the extent that "operating reliability" as defined in the NERC ORD Agreement is shared within the organization.

4. The Parties expressly agree that Control Performance Data shall otherwise only be disclosed through official releases and reports as authorized by NERC.

5. It shall not be a violation of this Agreement for the RS Member to discuss a specific balancing authority's Control Performance Data with the specific balancing authority staff with the intent to improve the specific balancing authority's Control Performance.

6. This Agreement shall be for the sole benefit of the parties hereto. This Agreement may be modified or waived only by a separate writing signed by the Parties. If any clause or provision of this Agreement is illegal, or unenforceable, then it is the intention of the Parties hereto that the remainder of this Agreement shall not be affected thereby, and it is also the intention of the Parties that in lieu of each clause or provision that is illegal, invalid or unenforceable, there be added as part of this Agreement a clause or provision as similar in terms to such illegal, invalid or unenforceable clause or provision as may be possible and be legal, valid and enforceable. This Agreement will be governed and construed in accordance with the laws of the State of New Jersey, except for any choice of law requirement that otherwise may apply the law from another jurisdiction.

This Agreement shall have a term of five (5) years from the date hereof.

# NERC

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

## NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

By: \_\_\_\_\_

Printed: \_\_\_\_\_

Title: \_\_\_\_\_

## NERC RESOURCES SUBCOMMITTEE MEMBER

Signed: \_\_\_\_\_

Printed: \_\_\_\_\_

# ALR1-12 Frequency Response Metric Data Collection Process

Draft September 23, 2011

1. CERTS-EPG produces a monthly spreadsheet for four interconnections (Eastern Interconnection or EI, Western or WI, Texas Interconnection or TI, and Québec). The spreadsheet captures significant frequency events based on the Resources Subcommittee (RS) specified threshold. The Frequency Monitoring Application (FMA) gathers and stores the raw data.
2. The spreadsheet is sent by CERTS-EPG to the Frequency Working Group (FWG) on the 15th of each month for the previous month's raw data.
3. The FNET application uses automatic emails to flag frequency deviations. Generation loss is estimated.
4. The actual generation loss for the FNET flagged frequency events is determined by the NERC Situation Awareness Coordinator from the Regional Entities and sent to the FWG.
5. The FWG members validate the data and add the actual generation loss values into the spreadsheet.
6. FWG sends the validated monthly sheet to the Resource Subcommittee (RS) and the Performance Analysis Subcommittee (PAS) on the 30th of each month for the previous month's raw data.
7. NERC staff will update the candidate event list on the NERC website that will be used to support the standard. The final official event list for a year will be identified as a subset of the posted candidate list.
8. PAS publishes the quarterly frequency response metric data on NERC's Reliability Indicators webpage. The initial trending will be based on annual median/mean and rolling 12 month values.

**Background Information**

The frequency delta thresholds recommended by RS for the Eastern, Western, Texas and Québec Interconnections are shown in Table 1.

<b>Table 1: Frequency delta thresholds recommended by RS</b>			
<b>Interconnections</b>	<b>Frequency Delta for events captured in (mHz)</b>	<b>Frequency Delta for Significant events that have a higher Delta</b>	<b>Time Window (Seconds)</b>
Eastern	24	36	15
Western	40	70	15
Texas	45	90	15
Quebec	140	200	15

The raw statistics for events in 2008, 2009, 2010 and the first half of 2011 has been listed in Table 2 below. This was sent by CERTS-EPG to the FWG on August 31, 2011.

<b>Table 2: Raw Statistics for frequency events from 2008 to July 2011</b>				
<b>Interconnections</b>	<b>EI</b>	<b>WI</b>	<b>TI</b>	<b>Québec</b>
2008	195	102	26	No Data
2009	78	72	85	No Data
2010	132	85	122	No Data
2011 (till July)	70	37	61	159

The statistics for TI from 2008 to 2011 were validated and modified by the FWG. Table 3 shows the statistics for TI that was sent by the FWG to the RS on September 02, 2011.

<b>Interconnections</b>	<b>TI</b>
2008	8
2009	51
2010	67
2011 (till July)	40

The FWG Lead members who will validate the data and add the actual generation loss values into the spreadsheet for the four interconnections are given in Table 4.

Terry L. Bilke	Eastern Interconnection
Don E. Badley	Western Interconnection
Sydney L. Niemeyer	Texas Interconnection
Michael Potishnak	Québec Interconnection

The first of the monthly reports was produced by CERTS-EPG for the FWG in July 2011. July 2011 has 22 frequency events and a summary is shown in Table 5.

**Table 5 – Summary of the 1st monthly report produced by CERTS-EPG for the FWG in July 2011**

### NERC INTERCONNECTION JULY, 2011 FREQUENCY EVENTS – SUMMARY DATA

#### Eastern Interconnection

Event Time			Time Zone	Event Frequency Data				Point C (win 8 sec after t.0)	Interconnection Bias Setting	Resource Information		Candidate for BA List	Candidate for beta	Load Resources Tripped Before	Point C
UTC (t.0) Date / Time (MMDDYY HH:MM:SS)	Local Time (t.0) Date / Time (MMDDYY HH:MM:SS)	Day		A Value Freq Error (from 60)	A Value average (t-16 to t-2)	B Value average (t+20 to t+52)	Hz Delta B-A			MW/0.1 Hz	Gross				
07/02/2011 8:45:21	07/02/2011 2:45:21	Sat	EDT	0.004	60.004	59.956	-0.048	59.969	-0.035	6349	-975	EES			-2024
07/02/2011 14:57:18	07/02/2011 10:57:18	Sat	EDT	-0.003	59.997	59.967	-0.031	59.958	-0.039	6349	-496	TVA			-1600
07/16/2011 7:07:00	07/16/2011 3:07:00	Sat	EDT	-0.007	59.993	59.948	-0.045	59.952	-0.041	6349	-613	TVA			-1370
07/21/2011 1:28:03	07/20/2011 21:28:03	Wed	EDT	0.009	60.009	59.967	-0.042	59.968	-0.041	6349	-902	TVA			-2167
07/25/2011 18:39:08	07/25/2011 14:39:08	Mon	EDT	0.019	60.019	59.989	-0.030	59.978	-0.041	6349	-985	PJM			-3242
07/28/2011 18:47:52	07/28/2011 14:47:52	Thu	EDT	-0.004	59.996	59.946	-0.050	59.947	-0.049	6349	-1242	PJM			-2486
07/30/2011 13:41:21	07/30/2011 9:41:21	Sat	EDT	-0.013	59.987	59.945	-0.042	59.947	-0.040	6349	-1386	PJM			-3337

#### Western Interconnection

Event Time			Time Zone	Event Frequency Data				Point C (win 8 sec after t.0)	Interconnection Bias Setting	Resource Information		Candidate for BA List	Candidate for beta	Load Resources Tripped Before	Point C	
Event #	UTC (t.0) (MMDDYY HH:MM:SS)	Local Time (t.0) (MMDDYY HH:MM:SS)		Day	A Value Freq Error (from 60)	A Value average (t-16 to t-2)	B Value average (t+20 to t+52)			Hz Delta B-A	MW/0.1 Hz					Gross
	07/03/2011 7:17:08	07/03/2011 0:17:08	Sun	PDT	-0.025	59.975	59.929	-0.046	59.901	-0.074	2024	-255	CISO			-526
	07/11/2011 4:17:33	07/10/2011 21:17:33	Sun	PDT	0.005	60.005	59.952	-0.052	59.911	-0.094	2024	-267	SRP			-496
	07/15/2011 2:46:41	07/14/2011 19:46:41	Thu	PDT	-0.035	59.965	59.928	-0.037	59.873	-0.092	2024	-264	BCHA			-706
	07/30/2011 9:17:34	07/30/2011 2:17:34	Sat	PDT	-0.007	59.993	59.937	-0.056	59.907	-0.086	2024	-426	NWMT			-763

#### ERCOT Interconnection

Event Time			Time Zone	Event Frequency Data				Point C (win 8 sec after t.0)	Interconnection Bias Setting	Resource Information		Candidate for BA List	Candidate for beta	Load Resources Tripped Before	Point C	
Event #	UTC (t.0) (MMDDYY HH:MM:SS)	Local Time (t.0) (MMDDYY HH:MM:SS)		Day	A Value Freq Error (from 60)	A Value average (t-16 to t-2)	B Value average (t+20 to t+52)			Hz Delta B-A	MW/0.1 Hz					Gross
	07/14/2011 20:53:55	07/14/2011 15:53:55	Thu	CDT	0.023	60.023	59.923	-0.100	59.917	-0.106	653	-259	ERCOT			-259
	07/17/2011 15:18:00	07/17/2011 10:18:00	Sun	CDT	-0.005	59.995	59.894	-0.101	59.879	-0.115	653	-144	ERCOT			-143
	07/18/2011 14:13:00	07/18/2011 9:13:00	Mon	CDT	-0.042	59.958	59.863	-0.094	59.879	-0.079	653	-127	ERCOT			-134
	07/21/2011 0:17:10	07/20/2011 19:17:10	Wed	CDT	0.006	60.006	59.811	-0.194	59.799	-0.206	653	-892	ERCOT			-459
	07/24/2011 16:59:24	07/24/2011 11:59:24	Sun	CDT	-0.025	59.975	59.872	-0.102	59.846	-0.128	653	-167	ERCOT			-163
	07/25/2011 22:57:12	07/25/2011 17:57:12	Mon	CDT	0.013	60.013	59.929	-0.084	59.918	-0.095	653	-306	ERCOT			-363

#### Hydro Quebec

Event Time			Time Zone	Event Frequency Data				Point C (win 8 sec after t.0)	Interconnection Bias Setting	Resource Information		Candidate for BA List	Candidate for beta	Load Resources Tripped Before	Point C	
Event #	UTC (t.0) (MMDDYY HH:MM:SS)	Local Time (t.0) (MMDDYY HH:MM:SS)		Day	A Value Freq Error (from 60)	A Value average (t-16 to t-2)	B Value average (t+20 to t+52)			Hz Delta B-A	MW/0.1 Hz					Gross
	07/29/2011 2:23:18	07/28/2011 22:23:18	Thu	EDT	0.006	60.006	59.879	-0.127	59.508	-0.498	420	-707	HQ			-559
	07/29/2011 2:23:26	07/28/2011 22:23:26	Thu	EDT	-0.178	59.822	59.891	0.069	59.874	0.052	420	588	HQ			-848
	07/29/2011 5:06:20	07/29/2011 1:06:20	Fri	EDT	-0.030	59.970	60.033	0.064	60.146	0.176	420	329	HQ			-517
	07/30/2011 8:06:58	07/30/2011 4:06:58	Sat	EDT	-0.025	59.975	60.022	0.047	60.109	0.134	420	113	HQ			-239
	07/31/2011 19:32:24	07/31/2011 15:32:24	Sun	EDT	-0.003	59.997	60.081	0.085	60.402	0.405	420	447	HQ			-527

# Housekeeping Tasks for New, Reconfigured or Retiring Balancing Authorities

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## ***Introduction***

This document outlines the “housekeeping” tasks that need to be done if there is a change in Balancing Authority footprints or names. These are not reliability tasks, but rather things that need to be done to enable the proper functioning of tools and the provision of accurate information.

There are four basic types of events that require action:

- **New BA – did not exist previously**
- **Merge – at least two BAs involved with one successor remaining**
- **Decertified – a BA goes out of operation for any reason.**
- **Successor-BA changes name or turns over responsibility to another entity.**

## ***Process Steps***

### **Register new BA**

- **Letter to REGION to start NERC certification process**
- **Obtain BA id – 4 character maximum label**
- **Add new BA to Bubble diagram**
- **Model Revision – IDC power flow representation**
- **Register Tagging** thru central function (**TSIN**) – check NERC website
- **Develop BA Bias** and obtain an L10 consider modification for Interconnection L10 from NERC
- **Notify CERTS** of new BA provide Bias and L10 values and RC provider
- **Support the ACE** reporting application with real time ACE on ICCP link
- **Obtain accounts** for Certs tools and Inadvertent application add interfaces for adjacent BAs
- **Coordination of Adjacent BAs and RC – update Reliability Plan**

### **Merge – at least two BAs involved with one successor remaining**

- **Letter to REGION to start NERC certification process**
- **Revise Bubble diagram**
- **Develop BA Bias** and obtain an L10 from NERC
- **Notify CERTS** of new BA provide Bias and L10 values and RC provider
- **Support the ACE** reporting application with real time ACE on ICCP link
- **Inadvertent** – revise interface BAs for monthly tie out with succeeding BA if necessary
- **Coordination of Adjacent BAs and RC – update Reliability Plan**

# Housekeeping Tasks for New, Reconfigured or Retiring Balancing Authorities

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## **Decertify BA**

- **Revise Bubble diagram**
- **Inadvertent** - Zero Balance or transfer Balance of Inadvertent to the successor BA – lock account at settlement
- Lock out on NERC BA applications – NERC data transfer ?
- **Develop BA Bias** and obtain an L10 from NERC due to removal

## **Successor-BA changes name or turns over responsibility to another entity**

- **Entity and REGION determine if there is a need to start NERC certification process**
- **Obtain BA id** – 4 character maximum label
- **Rename BA on Bubble diagram**
- IDC updated
- **Determine disposition of Inadvertent Interchange** (transfer to another BA or carry forward to new BA)
- **Register Tagging** thru central function (**TSIN**) – check NERC website
- **Repost CPS Bounds report with new entity name**
- **Notify CERTS** of new BA name
- **Support the ACE** reporting application with real time ACE on ICCP link (verify data transfer still works)
- **Obtain accounts** for Certs tools and Inadvertent application add interfaces for adjacent BAs